

CLAIMS

1. Distributed system (10) for issuing official stamps and/or titles (25), comprising:

a central control unit (12);

5 a plurality of local terminals (11) distributed throughout the land and suitable for issuing said official stamps and/or titles (25), said central unit (12) being suitable for controlling said local terminals (11) through a communication and control network (15, 15a);

10 a plurality of smart cards (21) assigned to the operators of said local terminals (11), said smart cards (21) being provided for being used by said operators to activate and enable said local terminals (11) to issue said official stamps (25); and

an initialisation programme (40) associated with said central unit (12), with said local terminals (11) and with said smart cards (21);

15 wherein said initialisation programme (40) is provided for initialising, in combination, a given local terminal (11) and a given smart card (21), so as to establish between said given terminal (11) and said given smart card (21) a bi-unequivocal relationship of correspondence and cooperation, such that, following the initialisation stage, said given smart card (21) is enabled, within the framework
20 of said system (10), to cooperate solely with said corresponding given terminal (11) and vice versa.

2. System according to claim 1, wherein said initialisation programme can be executed following the insertion of said given smart card in the corresponding

given terminal, and wherein said programme is provided for activating the following steps:

- recording in a given string an "in the clear" code (24a) and an invisible or protected code (24b) relative to said given local terminal (11) so as to obtain
5 information or a fingerprint defined unequivocally by said local terminal (11); and
- signing said fingerprint of said given local terminal with a secret key (35a) present on said given smart card (21), so as to generate a signed fingerprint to be sent to said central unit (12).

3. System according to claim 2, wherein the execution of said initialisation
10 programme (40) is preceded by a customisation step, the purpose of which is to associate and customize said given smart card (21) with a given account (16a) provided within the framework of said system (10).

4. System according to claim 2, wherein the execution of said initialisation
15 programme (40) is subordinated to the recording in a memory (24) of said given local terminal (11) of said "in the clear" code (24a) and of said protected code (24b).

5. System according to claim 2, wherein the execution of said initialisation
programme (40) determines the recording of said given smart card (21) on said
central control unit (12) and its enablement within the framework of said system
20 (10), in association with said given local terminal (11) with which said given smart card (21) has been initialised.

6. System according to claim 2, wherein said initialisation programme (40) is further provided for activating the following step:

- modifying a given data string (35d) recorded on said given smart card and normally employed for defining a personal identification code (PIN) of the holder of said smart card, so as to inhibit the availability of said personal identification code (PIN) to the user of said smart card.

5 7. System according to claim 2, wherein said initialisation programme executes the signature of the fingerprint of said given local terminal by using a so-called double, asymmetrical key algorithm.

8. System according to claim 1, wherein said initialisation programme (40) is installed on each of the local terminals of said system and constitutes a machine
10 programme true and proper, protected and non-modifiable, for each local terminal (11).

9. System according to claim 1, wherein the execution of said initialisation programme (40) is proposed by the system (10) in response to the insertion of a smart card not yet initialised in a respective local target terminal.

15 10. System according to claim 1 wherein said official stamps (25) consist of postage stamps and/or revenue stamps and/or stamped titles and/or labels and/or similar prints.

11. System according to claim 1 wherein said given local terminal (11) and the corresponding given smart card (21) are provided for controlling autonomously,
20 without the intervention of said central unit, the execution of local operations concerning the issuing of said official stamps, and wherein said given local terminal is provided for periodically transferring to said central unit data inherent in said local operations.

12. Method for presetting and initialising a smart card (21) within the framework of a distributed system (10) for issuing official stamps and/or titles (25), said smart card having a given data string (35d) generally provided for defining a personal identification code (PIN) of the holder of said smart card, said method comprising
5 the following steps:

- customising in advance (41) said smart card (21) in order to associate it with a bank account (16a) integrated in said system;
- inserting (42) said customized smart card (21) in a given target terminal (11) belonging to said system (10);
- 10 - modifying (46) said given data string (35d) in such a way as to render it unavailable to the holder of said smart card (21) and therefore inhibit the use of said personal identification code; and
- using said given string, thus modified, in order to unequivocally associate the smart card (21) with the given terminal (11) in which it has been inserted.

15 13. Smart card (21) preset for being used within the framework of a distributed system (10) for issuing official stamps and/or titles (25) comprising a plurality of local terminals (11) located throughout the territory for serving a plurality of respective users, said smart card (21) containing in recorded form in a memory (35):

20 a first plurality of legible data defining a public key (35b) of said smart card (21);

a second plurality of embedded data defining a secret key (35a) of said smart card (21); and

a given modified string defining information unavailable to the user of said smart card, wherein said modified data string is obtained by modifying a given string (35d), usually suitable for defining a personal identification code (PIN) for the holder of the smart card, in such a way as to render the information defined by said data string (35d) no longer available on the outside to the user of said smart card (21) but solely available on the inside of said system (10) in order to unequivocally associate said smart card (21) with a corresponding given terminal (11).

14. Local terminal (11) preset for operating in integrated mode within a broader system (10) for issuing official stamps and/or titles (25), comprising:

10 a memory (24) containing, in recorded form, a first in the clear code (24a), corresponding to the serial number of said local terminal (11), and a second invisible code (24b), generated at the time of manufacture of said local terminal; and

an initialisation programme (40) preloaded in said terminal,

15 wherein said initialisation programme (40) is provided for recording in a given string said first (24a) and said second code (24b) in such a way as to obtain information or a fingerprint suitable for unequivocally identifying said local terminal (11), and for sending said fingerprint to a smart card (21), inserted in said terminal (11), intended for cooperating in future uniquely with said local terminal (11).

20 15. Postal franking system (10), comprising:

a central control unit (12);

a plurality of local terminals (11) suitable for issuing franking elements (25), such as in particular postage stamps and/or labels and/or similar prints, for application on postal objects to be delivered by post;

a plurality of smart cards (21) assigned to the operators of said local terminals, said smart cards being provided for cooperating with said local terminals (11) in order to identify the respective operator and enable said terminals to issue said franking elements (25);

5 a communication network (15) for the communication and exchange of data between said central unit and said local terminals, in order to permit said local terminals (11) to be controlled by said central unit (12); and

an initialisation programme (40) associated with said central unit, (12) with said local terminals (11) and with said smart cards (21);

10 wherein said initialisation programme (40) is provided for initialising, in combination, a given smart card (21) and a corresponding given terminal (11) during a preliminary initialisation procedure,

and wherein said given smart card (21) and said corresponding given terminal (11), once initialised, establish a bi-univocal type correspondence
15 relationship, such that, subsequent to said preliminary initialisation step, said given local terminal (11) is enabled to issue said franking elements (25), solely after having recognized said corresponding given smart card (21), and conversely said given smart card (21) is suitable for being used by the respective operator for enabling only said corresponding given terminal (11).

20 **16.** System according to claim 15, wherein said franking elements are defined by respective amounts in turn determined by the tariffs for delivery of the corresponding postal items, and wherein each of said local terminals is associated, within the framework of said franking system, with a top-up account suitable for

containing an overall sum of money destined to diminish progressively in function of the amounts of the franking elements issued by the local terminal.